

REMARKS

Claims 3-5, 16-22, 34, 36-38, 40, 41, and 43-47 are pending. Claims 21 and 22 have been amended. Claims 3, 5, 16-20, 34, 36-38, 40, and 41 have been previously presented. Claim 4 is original. Claims 43-47 are new. Claims 1, 2, 6-15, 23-33, 35, 39, and 42 have been canceled. No new matter has been introduced by the amendment.

1. Claim Objection

Claims 21 and 22 have been objected to because of informalities. Claims 21 and 22 have been amended as suggested by the Examiner. Accordingly, the Applicant respectfully submits that the objection to claims 21 and 22 has been overcome and should be withdrawn.

2. Claim Rejection under 35 U.S.C. § 112, First Paragraph

Claims 2, 5, 17, 18, 34-36, 41, and 42 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 2, 35 and 42 have been canceled. As to the rest of the claims, the Examiner asserted that the recitation of "and combinations thereof" failed to comply with the written description requirement (Office Action, pages 2-3). The original claims recite, for example in claim 5, that "a compound selected from the group *comprising* a bioactive agent, ..., or a pigment" (emphasis added). The "selected from the group *comprising* ... or ..." claim language was replaced with "selected from the group consisting of ... and combinations thereof" in the prior amendment in order for the claims to conform to the common practice in drafting Markush claim language in the U.S. The Applicant respectfully submits that the original claim language using

the term "comprising ... or" provides adequate support for the amendment ("and combinations thereof").

Moreover, the present application discloses multiple embodiments where various combinations of the recited Markush group members are used. For example, the nitrobenzene in fluorocarbon example on page 27, line 27 to page 28, line 19, discloses a combination of an acid (5% dichloroacetic acid) and a dye (Rhodamine 6G) in the discontinuous phase, two Markush group members recited in claims 5 and 34.

In view of the above, the Applicant respectfully submits that the rejection of claims 5, 17, 18, 34, 36, and 41, is improper and should be withdrawn.

3. Claim Rejection under 35 U.S.C. § 102(b) And § 103(a)

A. Independent Claims 1 And 35, And Their Dependent Claims

Claims 1 and 2 have been rejected under 35 U.S.C. § 102(b) over Paolini, Jr. et al. (U.S. Pat. Pub. No. 20020131147). Claims 1, 2, and 39 have been rejected under 35 U.S.C. § 102(a) or (e) over McEntee et al. (U.S. Pat. Pub. No. 20040050701). Claims 35 and 42 have been rejected under 35 U.S.C. § 102(a) or (e) over McEntee. Claims 1, 2, and 39 have been rejected under 35 U.S.C. § 102(b) over Clancy (U.S. Pat. No. 3,347,702). Claims 35 and 42 have been rejected under 35 U.S.C. § 102(b) over Clancy. Claims 1, 2, 35, 39, and 42 have been canceled. Accordingly, the Applicant respectfully submits that the rejection of claims 1, 2, 35, 39, and 42 is moot and should be withdrawn.

B. Independent Claim 3 And Its Dependent Claims

Claims 3-5, 16, 17, 19-21, and 40 have been rejected under 35 U.S.C. § 102(b) over Clancy. The Applicant respectfully traverses this rejection.

Clancy does not teach an electrically charged discontinuous phase, as required by independent claim 3. As discussed in the prior response, the discontinuous phase of Clancy including the ionic surfactant may have neutral charge on the droplets, in other words, the discontinuous phase of Clancy may be both ionic and not electrically charged. In response, the Examiner asserted that the ionic surfactant used in the Clancy emulsion (stearyl dimethyl benzyl ammonium chloride) forms a charge on the surface of the aqueous droplet (ionized) (Office Action, page 8). However, as discussed in the prior response, a person having ordinary skill in the art would not equate "ionized" with "electrically charged". Indeed, a person having ordinary skill in the art would appreciate that an ionic solution including an ionic compound, such as an ionic surfactant, could be *not* electrically charged. For example, an ionized surfactant in an aqueous solution is ionized, that is, it has both a positively charged group and a negatively charged group. However, the aqueous solution containing the ionic surfactant could be electrically neutral, that is, not electrically charged because the positive and negative charges could be both balanced and distributed evenly in the aqueous solution. Thus, an ionic compound is *not necessarily* electrically charged. Accordingly, the Applicant respectfully requests that the Examiner either provide evidence to support the assertion that the ionic surfactant used in the Clancy emulsion (stearyl dimethyl benzyl ammonium chloride) forms a charge on the surface of the aqueous droplet, or withdraw the rejection.

Moreover, there is no teaching in Clancy that Triton X-400 of Clancy does not significantly reduce the volume resistivity of the continuous phase (benzene with significant amount of ethyl cellulose dissolved therein). The Examiner asserted that the photoconductive layer formed has substantial insulating character, which the Examiner asserted reads on the requirement that the selected surfactant not significantly reduce the volume resistivity of the continuous phase.

The Examiner's reliance on Clancy to teach a selected surfactant that does not significantly reduce the volume resistivity of the continuous phase is misplaced. Whether the photoconductive layer of Clancy is insulating or not is irrelevant. We draw the Examiners attention to the fact that the reference to the photoconductive layer referred to in Column 1 lines 35 to 54 is in relation to the dried layer not to the emulsion which is used to form it. Claim 3 recites "the surfactant is selected to not significantly reduce the volume resistivity of the *continuous phase*" (emphasis added). A person having ordinary skill in the art would appreciate that whether the photoconductive layer is insulating or not would not indicate whether the volume resistivity of the continuous phase (benzene with significant amount of ethyl cellulose dissolved therein as disclosed in Clancy) is reduced or not, or whether the continuous phase is insulating or not. Moreover, there is no teaching from Clancy on whether the formed photoconductive layer even contains the Triton X-400 surfactant or not. A person having ordinary skill in the art would appreciate that Triton X-400 could decompose at about 120 °C (about 248 °F). The samples in Clancy were dried at 260 °F (see column 6, lines 59-60). As such, the Triton X-400 in the Clancy samples might well be decomposed in the drying step already.

Furthermore, according to one embodiment of the present invention, as described in the Example given at page 22 lines 4 to 11 of the present application, the surfactant Triton X-100 is used. A person having ordinary skill in the art would appreciate that Triton X-100 is commonly known as octylphenol ethylene oxide condensate, a non-ionic surfactant. Triton X-100 in the Example has been selected so that its use does not significantly reduce the volume resistivity of the continuous phase. On the other hand, the surfactant used in Clancy, Triton X-400, is ionic as discussed above and in Clancy, column 7 lines 65 to 67, and thus would reduce the volume resistivity of the continuous phase.

In view of the above, the Applicant respectfully submits that Clancy would not anticipate independent claim 3. Accordingly, the rejection of independent claim 3 is improper and should be withdrawn.

Moreover, the dependent claims are patentable since they depend from the patentable independent claim 3.

C. Independent Claim 34 And Its Dependent Claim

Claims 34 and 41 has been rejected under 35 U.S.C. § 102(b) over Clancy. The Applicant respectfully traverses this rejection.

As discussed in section 3B above, Clancy does not teach an electrically charged discontinuous phase, as required by independent claim 34. Also, Clancy does not teach a surfactant selected to not significantly reducing the volume resistivity of the continuous phase

In view of the above, the Applicant respectfully submits that Clancy would not anticipate independent claim 34. Accordingly, the rejection of independent claim 34 under 35 U.S.C. § 102(b) is improper and should be withdrawn.

Moreover, dependent claim 41 is patentable since it depends from the patentable independent claim 34.

4. New Claims

Claims 43-47 are new. Support for new claims 43-47 can be found, for example, in original claims 8 and 12.

5. Allowable Subject Matter

The Applicant notes with appreciation that claims 18 and 36 would be allowable if the 35 U.S.C. § 112, first paragraph rejection is overcome, and if rewritten in independent form including all the limitations of the base claim and any intervening claims.

The Applicant also notes with appreciation that claim 22 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

The Applicant, however, traverses the Examiner's assertion that the ionic surfactant of Clancy "forms charged aqueous discontinuous phase" (Office Action, page 9). As discussed in section 3B above, Clancy does not teach an electrically charged discontinuous phase. Nevertheless, as the Examiner has found, since multiple recited limitations in claims 18, 22, and 36 are not taught by Clancy or other prior art of record, Clancy would not anticipate claims 18, 22, and 36 or render the same obvious.

6. Conclusion

Based on the above, the Applicant respectfully submits that the claims are in condition for allowance. If any issues remain, the Examiner is kindly invited to contact the undersigned attorney to expedite allowance.

Respectfully submitted,

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/Yuezhong Feng/
Yuezhong Feng, Ph.D.
Registration No. 58,657
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610
(312) 321-4200